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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,320	12/12/2003	Bertrand Lion	LOREAL 3.0-003; OA02421/U	2210
530 7590 04/06/2007 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER BARHAM, BETHANY P	
			ART UNIT	PAPER NUMBER
			1615	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/06/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/735,320

Applicant(s)

LION, BERTRAND

Examiner

Bethany P. Barham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 04/12/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Summary***

Receipt of IDS filed on 04/12/2004 is acknowledged. Claims 1-24 are pending.  
Claims 1-24 are rejected.

### **Objections**

Claim 8 recites "the dispersion of claim 14", this is believe to be an error and for the purpose of examination was treated as dependent from claim 1.

### **New Rejections**

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4, 14-18, 20 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,851,517 ('517).

The limitations of claims 1-2, 4, and 14-18 are taught by '517:

- '517 teaches a dispersion of particles surface stabilized by polymer particles in a non-aqueous medium, in a cosmetic, hygiene or pharmaceutical composition (abstract). The dispersion of '517 is taught to consist of a non-aqueous liquid having a global solubility parameter, according to the Hansen solubility space, of less than  $17 \text{ (MPa)}^{1/2}$ , or monoalcohols having a global parameter, according to the Hansen solubility space, of less than  $20 \text{ (MPa)}^{1/2}$  or mixtures thereof (col. 1, lines 36-51). '517 teaches that appropriate non-aqueous liquids of less than  $17 \text{ (MPa)}^{1/2}$  are silicone oils such as polydimethylsiloxanes and polymethylphenylsiloxanes, hydrocarbon, fluoro oils, plant oils etc (col.3, lines 30-55).
- Further, '571 teaches that the dispersions nanoparticles of polymers are 5 to 600 nm in size and the polymers of the invention may be of any nature, possible to have radical polymers, polycondensates or even polymers of natural origin and that the polymers may be crosslinked with film-formers or non-film formers such as vinyl or acrylic radical copolymers or homopolymers, like polymethyl methacrylate, polystyrene or poly-tert-butyl acrylate and have a number average molecular weight of about 2000 to 10,000,000 (col. 2-line 33 to col. 3, line 6).
- '517 teaches that the polymers that act as stabilizers are incorporated and may be sequential or grafted block copolymers comprising at least one block of polyorganosiloxane typed and at least one block of a radical polymer or of a polyether or of a polyester (col.1, lines 52-55), in the amount of 2-30%, preferably 5-20% by weight that mention may be made of the grafted copolymers of

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acrylic/silicone type which may be employed in particular when the non-aqueous medium contains silicone (col.4, lines 55-60).

The limitations of claims 20 and 22-24 are taught by '571:

- '571 teaches that oils may be present such as silicone oils, PDMSs, which are optionally phenylated, such as phenyltrimethicones, and volatile oils such as cyclotetradimethylsiloxane, cyclopentadimethylsiloxane, etc (col. 6, lines 2-8).
- '571 teaches additional components such as waxes, oils, gums and/or pasty fatty substances, pigments, antioxidants, fragrances, essential oils, preserving agents, moisturizers, vitamins, surfactants, etc (col. 5, line 45 to col. 6, line 37).
- '571 teaches that the hair composition of the invention is a crosslinked polymer dispersion in a silicone oil, which can be aerosols, foams, shampoos, conditioners, lotions or gels for styling or treating or lacquers or lotions for setting the hair and make-up products are for making up the eyelashes, mascara, eye-liner; lipstick, lip gloss or foundation (col. 6, lines 44-58). '571 teaches that the composition is to care for or make up the skin or keratin substances or a hair composition or a sun composition (col. 5, lines 33-38).

Claims 1-17 and 19-24 are rejected under 35 U.S.C. 102(b) as being anticipated by US WO 93/23446 ('446), as evidenced by 5,851,517 ('517).

The limitations of claims 1, 3-5, and 7-8 are taught by '446:

- '446 teaches a cosmetic composition comprising adhesive agents which are polysiloxane grafted polymers made by polymerization of polysiloxane containing

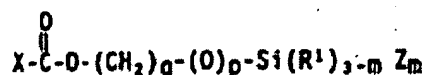
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monomers and non polysiloxane containing monomers, the agent having a weight average molecular weight of at least about 20,000, and 1 to 50% by weight of polysiloxane containing monomer (abstract). '446 teaches that the molecular weight of a vinyl polymer backbone, polydimethylsiloxane macromer is at least about 500, preferably from about 1000 to 100,000, most preferably about 2000 to about 50,000 (pg.5, lines 29-pg. 6, line 7).

- '446 teaches that the polysiloxane grafted polymers comprise 1-50% by weight of polysiloxane monomers and 50-99% by weight of the non-polysiloxane monomers which can be selected from A and B monomers (pg.8, lines 3-8). A monomers are taught by '446 to preferably include n-butyl methacrylate, isobutyl methacrylate, t-butyl methacrylate, 2-ethylhexyl methacrylate, methyl methacrylate, etc, while B monomers include acrylic acid, methacrylic acid, hydroxyethyl methacrylate, etc. (pg. 8, line 9-pg. 9, line 8).

The limitations of claims 6 and 9-15 are taught by '446:

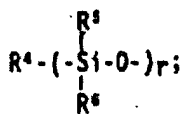
- '446 teaches that the preferred polysiloxane monomer has the formula:



where m is 1-3, (preferably m=1); p is 0 or 1; q is 2-6; R<sup>1</sup> is hydrogen, hydroxyl,

lower alkyl, alkoxy, alkylamino, aryl or alkaryl (preferably alkyl); X is  $\begin{array}{c} CH=C- \\ | \quad | \\ R^2 \quad R^3 \end{array}$ ; R<sup>2</sup> is preferably hydrogen R<sup>3</sup> is hydrogen, methyl or CH<sub>2</sub>COOH (preferably methyl);

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and Z is  $R^4$ ,  $R^5$ , and  $R^6$ , independently, preferably lower alkyl, r is an integer of about 5 or higher, preferably 10-1500 (most preferably about 100 to about 250). Most preferably  $R^4$ ,  $R^5$ , and  $R^6$  are methyl, p=0 and q=3 and the level of this monomer is from 1 to about 50%, preferably about 1 to about 40%, more preferably about 2 to about 25% (pg. 9, line 9 to pg. 10, line 15).

- '446 teaches that polymer which are soluble or dispersible in less polar or nonpolar solvents, such as cyclomethicone (which is the silicone oil polydimethylsiloxanes, and evidenced by '517 teaches above as a non-aqueous liquids of Hanson solubility of less than 17 (MPa)<sup>1/2</sup>) ('446 pg.10, line 30 and '517 col.3, lines 30-55). '446 teaches the compositions preferably comprise about 5-98% monomer A, from 0 to 80%, most preferably 0 to 20%) of monomer B, and from about 1 to about 40% (preferably 2 to about 25%) of monomer C (pg.10, line 30-pg.11, line 2).
- '446 teach examples polymers I-III with acrylic and silicone macromers, specifically polymer III is a PDMS macromer (polydimethylsiloxane) polymerized with isobutyl methacrylate, ethylhexylmethacrylate and dimethylmethacrylamide (pg.12, line 7-pg. 13, line 35).

The limitations of 16-17 and 19 are taught by '446:

- '446 teaches that the polymeric agent has a weight average molecular weight of at least about 20,000 (abstract, pg. 4, lines 33-35) and that there is no upper limit

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but most preferably between the limits of about 100,000 and about 750,000 (pg. 5, lines 1-8).

The limitations of claims 2, and 20-24 are taught by '446:

- A mixture of acceptable carriers are taught by '446 which are suitable for application to the skin and hair are present in the amount of about 0.5-99.5%, most preferably from about 10 to about 98% (col. 15, lines 26-32), such as volatile silicon derivatives, especially siloxanes, such as phenyl pentamethyl disiloxane, methoxypropyl heptmethyl cyclotetrasiloxane, cyclomethicone, dimethicone, etc. (pg. 16, lines 16-25). As evidenced by '517 silicone oils above have a Hanson solubility of less than 17 (MPa)<sup>1/2</sup> ('517 col.3, lines 30-55).
- '446 teaches additional components such as surfactants, pearlescent aids, coloring agents, oxidizing agents, reducing agents, sequestering agents, perfumes, polymer plasticizing agents, etc (pg. 28, line 22-pg. 29, line 13).
- Examples I-III teach the polysiloxane graft polymer composition in the amount of 4.5% by weight of the composition, example VIII teaches 3%, example XI teaches 4% by weight.
- '446 teaches a product for the hair (hair spray, mousse, tonic, shampoo, conditioner) (pg. 16, lines 1-3) and cosmetic compositions such as make up, mascara, eye liner, nail polish, skin creams and lotions, etc (pg. 4, lines 26-32).

### ***Correspondence***




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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bethany Barham whose telephone number is (571)-272-6175. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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